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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
STEELE, JENNIFER A	

ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
10/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/700,405	ROCK ET AL.	
	Examiner	Art Unit	
	Jennifer Steele	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *8/13/2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,17-31,33,35,36,38 and 62* is/are pending in the application.

4a) Of the above claim(s) *6,10 and 21-25* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-9,11-15,17-20,26-31,35-36,38,62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. The Affidavit under 37 CFR 1.132 filed 8/13/2007 is insufficient to overcome the rejection of claim 1-5, 7-9, 11-15, 33, 35-36, 38 and 62 based upon 35 USC 102/103 rejection as set forth in the last Office action because: Applicants have presented evidence in the form of Exhibits A, B, C, and D wherein A and B are color photographs and C and D are fabric samples. Applicant's evidence is directed to fabric with the claimed coating and fabric without the claimed coated. This evidence is insufficient to show that the fabric made of the current process . is different from the prior art. The evidence is insufficient to show that the claimed features of 30-195 holes per lineal inch and coating add on level present unexpected results and are distinguishable from the prior art. A showing of evidence where the coating add on level is less than or greater than the claimed invention or a coating produced of a rotary screen with greater or fewer holes per lineal inch would provide evidence that the claimed invention is different than the prior art. Applicant has not provided evidence that can support the criticality of the claimed ranges and has not provided evidence or comparative data that the claimed invention is different from the prior art. Applicants state that the very fine, discrete segments of coating do not substantially effect the hand tactile and breathability of the fabric. Applicants have not provided sufficient support for these statements in the specification and the Exhibits A and B are glued to a cardboard paper and while soft to the touch it is difficult to determine the full extent of the fabric while it is adhered to the presentation board. Applicant's statements that Gunzel's coating is caused to melt and

the filament of the web to lose their identity and Gunzel's structure would impede breathability. These statements are not commensurate with the scope of the claims. The applicant does not disclose how the coating of the claimed application affects the fibers and filaments and does not disclose how the coating affects breathability.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1 as amended recites the limitation that "the non-continuous coating is without substantial effect on hand tactile and breathability of the knit construction of the fabric body". There is not support or a teaching in the specification for this limitation other than page 5, line 13 which simply states that the fabric overcomes deficiencies of prior art fabrics.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claim 1-5, 7-9, 11-15, 33, 35-36, 38 and 62 rejected under 35 U.S.C. 103(a) as obvious over Gunzel et al. (WO 01/12889) in view of Blauer et al. (US 5,626,949). Gunzel teaches a treated fabric suitable for applications such as garments, tenting, footwear, bivy bags and other protective coverings or shelters (pg 3, lines 20-26). Gunzel teaches a woven or knitted fabric having a discontinuous randomly disposed polymeric material (pg 3, lines 25-35). Gunzel teaches that the woven or knitted fabric can have a surface that is fleeced or sanded (pg. 5, lines 20-30). Gunzel teaches that the use of the polymer areas provide better local abrasion resistance needed around cuffs, collars, pocket edges and generally any folds or creases (pg 6, lines 20-30). In Figures 1-6, Gunzel teaches the configuration of the discrete areas of coating and teaches that the polymer coating reduces local abrasion and, therefore, would provide a different performance characteristic in regards to pilling. Gunzel teaches by referencing Blauer et al. (US 5,626,949) that predetermined and repeating patterns such as honeycombs, grids, and discrete dots can be used but also teaches that regular

patterns are prone to disadvantages (pg. 2, lines 7-18). Gunzel teaches the preferred invention has discontinuous random pattern, however also teaches patterned coatings. Therefore it would have been obvious to one of ordinary skill in the art to select a discontinuous polymer coating in patterned or random form as taught by Gunzel and Blauer. Gunzel teaches a coating add on level of 5 to 40 gsm which is equivalent to 0.15-1.2 ounces/sqyd and in the range of applicants invention. Gunzel differs from the current application and does not teach applying the coating by a single head rotary screen having about 30 to about 195 holes per inch.

Blauer teaches a shell for outerwear comprising an outer closely woven synthetic fabric, a high tensile strength stratum printed on the inner face and covering 10 to 90% of the surface of the inner face (ABST). Blauer teaches a printed stratum of a highly flexible elastomer such as an acrylic urethane applied directly to the inner face of the fabric. The elastomer consists of an aqueous blend of acrylic, urethane and silicone. Blauer teaches a coating add on level of 0.3 to 0.5 ounces per square yard and encompasses the claimed range of about 0.5 to 6 ounces per square yard. Blauer teaches the method of applying the coating is with a rotary screen with a pattern. Blauer teaches that a multiplicity of patterns, both unconnected and connected are satisfactory provided the coverage is from 10-90% of the fabric. Blauer teaches that breaks or discontinuities in the printed stratum allow a harder urethane to be used which results in a fabric that is durable, a coating that does not wash off and does not make the fabric too stiff for comfort. Blauer does not teach the mesh size or density of the rotary screen pattern.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a discontinuous coating pattern on a fleeced fabric by a method of a rotary screen motivated to produce a fabric that is soft and breathable yet has improved durability and abrasion resistance. It would have been obvious to optimize and select a rotary screen mesh that provides the pattern and level of coating required as taught by Blauer and Gundel.

As to claim 2, Gunzel teaches a shell fabric with properties of waterproofness, windproofness, water vapor permeability but does not teach insulation property. When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention the examiner has basis for shifting the burden of proof to applicant as in In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP § § 2112- 2112.02

As to claim 3, Gunzel teaches that, despite the use of the polymer coating, the fabric maintains good moisture vapor transmission (pg 3, lines 15-20).

As to claim 4 and 5, Gunzel teaches that the fabric can be used in a garment which means any article that can be worn such as footwear, hats, gloves, shirts, coats, trousers (page 4, lines 30 - 35) as required by claims 33 and 35 - 36. It should be noted that "elbow region" and "shoulder region" are not given patentable weight because there is no special relationship or structure provided by those limitations. Furthermore, Gunzel teaches reinforcing such apparel and indicate that it is desirable to use the coating in areas that are subject to abrasion.

As to claims 12 - 13, although Gunzel does not explicitly teach the claimed bound groupings of yams have a relatively higher tenacity than individual yam fibers and that the bound groupings have tenacity greater than 5 grams per denier, it is reasonable to presume that the claimed properties are inherent. Support for said presumption is found in the use of like materials (i.e. a knitted polyester fabric having a discrete polymer coating comprising Applicant's claimed polymers) which would result in the claimed properties. The burden is upon the Applicant to prove otherwise. In re Fitzgerald 205 USPQ 594. In addition, the presently claimed properties would obviously have been present once the Gunzel product is provided. Note In re Best, 195 USPQ at 433, footnote 4 (CCPA 1977) as to providing of this rejection made above under 35 USC 102.

2. Claim 17-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Gunzel (WO 01/12889) and in view of Blauer et al. (US 5,626,949) and Rock et al. (US 2001/0046580). The previous Office Action rejection of 4/19/2007 is maintained with the revision that the rejection is in view of Blauer in combination with Gunzel.

3. Claim 26-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Gunzel (WO 01/12889) in view of Blauer et al. (US 5,626,949) and Rock et al. (US 2001/0046580) in further view of Grunfeld (US 5,198,288). The previous Office Action rejection of 4/19/2007 is maintained with the revision that the rejection is in view of Blauer in combination with Gunzel.

4. Claim 30-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Gunzel (WO 01/12889) in view of Blauer et al. (US 5,626,949) and Rock et al. (US

2001/0046580) in further view of Muramoto et al. (US 5,171,633). The previous Office Action rejection of 4/19/2007 is maintained with the revision that the rejection is in view of Blauer in combination with Gunzel.

5. Claim 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Gunzel (WO 01/12889) in view of Blauer et al. (US 5,626,949) in further view of Jackson et al. (US 6,238,789). As to claim 38, Gunzel in view of Blauer differs and does not teach a coating add on level in the range of 1.7 ounces/sqyd. Gunzel teaches a coating add on level of 0.15 to 1.2 ounces/sqyd and Blauer teaches a coating add on level of 0.3 to 0.5 ounces/sqyd.

Jackson teaches a breathable wallcovering of polyester fiber having a smooth decorative feel, which can be printed with a design or pattern (ABST). The coating is applied by a preferred method of rotary screen coating. Rotary screen printing is preferred because it provides highly localized flow to localized variations in the fiber orientation. The thickness or unevenness of the surface of the nonwoven ply results in small discontinuities, holes or gaps which on fusion creates holes or pores in the fused polymeric ply. The coating is applied at a level of 1.5 to 5.0 ounces per square yard (col. 5, lines 30-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a coating level of 1.7 ounces per square yard motivated to produce a permeable discontinuous coating by a method of rotary screen printing.

Response to Arguments

6. Applicant's arguments filed 8/13/2007 have been fully considered but they are not persuasive. Applicant has amended claims to more clearly define the scope of current invention. Examiner has withdrawn previous 35 USC 103(a) rejection as obvious over Gunzel and presented new grounds of rejection with respect to Gunzel in view of Blauer. Wherein Blauer was previously referenced in Gunzel, Examiner has presented new grounds of rejection to clarify the features that are referenced by Blauer and the features that are relied upon in Gunzel. Gunzel teaches a fabric with a discontinuous coating and Blauer teaches a fabric of a patterned coating. Both references teach coating add on levels in the range of the claimed invention. Wherein the amended claim 1 and 62 have the added product by process limitation, the burden of proof in on the applicant to provide evidence or comparative data that the claimed invention produced of the claimed process produces unexpected results.

7. Applicant argues that the configuration of the coating material allows the coating to flow between the fibers and reduce fiber fraying without generating a 3-dimensional image. Applicant is arguing limitations that are not commensurate with the scope of the claims. The claims do not recite that the coating flows between the fibers and while the Exhibits C and D show that the coated fabric and the uncoated fabric are virtually the same to touch and the visual eye, the patentability of the product is dependent on the claim limitations as recited.

8. Applicant arguments are not persuasive and the 35 USC 103(a) rejection of Gunzel in view Blauer and Rock is presented in this office action. Rock is relied upon to teach the features of the knitted structure and not the non-continuous coating.

9. Applicant arguments are not persuasive and the 35 USC 103(a) rejection of Gunzel in view Blauer and Grunfeld is presented in this office action. Grunfeld is relied upon to teach the features of the elastomeric material and therefore this feature was known in the art at the time the invention was made.

10. Applicant arguments are not persuasive and the 35 USC 103(a) rejection of Gunzel in view Blauer and Muramoto is presented in this office action. Muramuto is relied upon to teach the feature of sheath-core polyurethane yarns. With respect to Applicant's arguments that there is no suggestion of motivation to combine, the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347,21 USPQ2d 1941 (Fed. Cir. 1992).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Steele whose telephone number is (571) 272-7115. The examiner can normally be reached on Office Hours Mon-Fri 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S./

/Elizabeth M. Cole/
Primary Examiner, Art Unit 1794

10/25/2007